AMENDMENTS TO THE CLAIMS

1.   (CURRENTLY AMENDED)   A device comprising:

a decode processor ~~memory manager~~ configured to (i) ~~map~~ divide a first picture from a video signal ~~among~~ into a plurality of picture segments, ~~and~~ (ii) divide each one of said picture segments into a plurality of tiles and (iii) generate a list associating each one of said tiles ~~picture segments~~ to a corresponding one page of a plurality of ~~physical~~ pages in a corresponding one bank of a plurality of banks in a first memory such that each one of said picture segments has (a) at least a first one of said tiles associated with a first of said banks and (b) at least a second one of said tiles associated with a second of said banks; and

a direct memory access unit configured to store said first picture ~~among said physical pages~~ in said first memory according to said list ~~and said mapping~~.

2.   (CURRENTLY AMENDED)   The device according to claim 1, further comprising a ~~mapping~~ second memory configured to (i) store said list and (ii) transfer said list ~~from said memory manager~~ to said direct memory access unit.

3.   (CURRENTLY AMENDED)   The device according to claim 2, further comprising ~~a decode processor configured to request said~~ a memory manager <u>configured</u> to <u>(i) generate a map allocating</u> ~~allocate~~ space in said <u>first</u> memory to store said first picture <u>and</u>

5   <u>(ii) store said map in said second memory</u>.

4.   (CURRENTLY AMENDED)   The device according to claim 3, wherein <u>(i)</u> said memory manager is further configured to transfer an identification value ~~for~~ <u>identifying said map of</u> said first picture to said decode processor<u>, (ii) said decode processor</u>

5   <u>is further configured to transfer said identification value to said</u> <u>direct memory access unit and (iii) said direct memory access unit</u> <u>is further configured to use said identification value to locate</u> <u>said map in said second memory</u> ~~after allocating said picture~~ ~~segments~~.

5.   (CURRENTLY AMENDED)   The device according to claim ~~4~~ <u>1</u>, wherein ~~(i) said processor is further configured to transfer~~ ~~said identification value to said direct memory access unit to~~ ~~locate said mapping in said mapping memory, (ii) said first picture~~

5   ~~is divided into a plurality of spatially rectangular regions mapped~~ ~~to an integer number of said physical pages and (iii) each group~~ ~~comprising~~ <u>each one of said picture segments comprises</u> four of said

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tiles spatially ~~rectangular regions sharing~~ <u>arranged to share</u> a common corner ~~is mapped among at least two banks of said memory~~.

6.   (CURRENTLY AMENDED)   The device according to claim 1, wherein each of said picture segments is mapped to ~~at least one of said physical pages in each of a plurality of~~ <u>at least four of</u> <u>said</u> banks in said <u>first</u> memory.

7.   (CURRENTLY AMENDED)   The device according to claim 1, wherein said picture segments ~~for~~ <u>of</u> said first picture are stored in <u>a plurality of</u> physically non-contiguous address ranges in said <u>first</u> memory.

8.   (ORIGINAL)   The device according to claim 1, wherein each of said picture segments comprises one group of a plurality of luminance samples and a plurality of chrominance samples from said first picture.

9.   (CURRENTLY AMENDED)   The device according to claim 1, wherein ~~said first picture is divided into~~ <u>said tiles comprise</u> a plurality of spatially ~~rectangular~~ <u>square</u> regions ~~each mapped to an integer number of said physical pages~~.

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10. (CURRENTLY AMENDED)   The device according to claim ~~1~~ 9, wherein ~~each group comprising four~~ said picture segments comprise a plurality of ~~said~~ spatially ~~rectangular~~ square regions ~~sharing a common corner is mapped among at least two banks of said memory~~.

11. (CURRENTLY AMENDED)   A method ~~for~~ of storing a video signal, comprising the steps of:

(A) ~~mapping~~ dividing a first picture from said video signal ~~among~~ into a plurality of picture segments;

(B) dividing each one of said picture segments into a plurality of tiles;

(C) generating a list associating each one of said tiles ~~picture segments~~ to a corresponding one page of a plurality of ~~physical~~ pages in a corresponding one bank of a plurality of banks in a memory such that each one of said picture segments has (a) at least a first one of said tiles associated with a first of said banks and (b) at least a second one of said tiles associated with a second of said banks; and

(D) ~~(C)~~ storing said first picture ~~among said physical pages~~ in said memory according to said list ~~and said mapping~~.

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12. (CURRENTLY AMENDED) The method according to claim 11, wherein step (D) ~~(C)~~ comprises the sub-step of:

storing said first picture using a plurality of direct memory access operations.

13. (CURRENTLY AMENDED) The method according to claim 11, further comprising the step of:

marking ~~said picture~~ a plurality of memory segments in said memory that have been allocated to said first picture as used.

14. (CURRENTLY AMENDED) The method according to claim 13, further comprising the step of:

deallocating said ~~picture~~ memory segments from said first picture to free space in said memory.

15. (CURRENTLY AMENDED) The method according to claim 14, further comprising the step of:

marking said ~~picture~~ memory segments deallocated from said first picture as free.

16. (CURRENTLY AMENDED) The method according to claim 15 ~~11~~, further comprising the step of:

mapping ~~allocating~~ a second picture from said video signal ~~among said picture~~ to said memory segments including at

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5   least one of said ~~picture~~ <u>memory</u> segments deallocated from said

first picture.

17.   (ORIGINAL)   The method according to claim 16,

wherein said first picture has a different size than said second

picture.

18.   (CURRENTLY AMENDED)   The method according to claim

11, further comprising the step of:

generating a value identifying which of ~~said picture~~ <u>a</u>

<u>plurality of memory</u> segments <u>in said memory</u> are mapped to said

5   first picture.

19.   (CURRENTLY AMENDED)   The method according to claim

11, wherein each <u>one</u> of said picture segments is mapped to ~~at least~~

~~two of said physical pages in each of a plurality~~ <u>all</u> of <u>said</u> banks

in said memory.

20.   (CURRENTLY AMENDED)   ~~An~~ <u>A</u> device comprising:

means for ~~mapping~~ <u>(i) dividing</u> a first picture from a

video signal ~~among~~ <u>into</u> a plurality of picture segments~~,~~<u>, (ii)</u>

<u>dividing each one of said picture segments into a plurality of</u>

5   <u>tiles and (iii)</u> ~~means for~~ generating a list associating each <u>one</u> of

said <u>tiles</u> ~~picture segments~~ to <u>a corresponding one page of</u> a

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plurality of ~~physical~~ pages <u>in a corresponding one bank of a plurality of banks</u> in a memory <u>such that each one of said picture segments has (a) at least a first one of said tiles associated with a first of said banks and (b) at least a second one of said tiles associated with a second of said banks</u>; and

means for storing said first picture ~~among said physical pages~~ <u>in said first memory</u> according to said list ~~and said mapping~~.